

METHOD AND APPARATUS FOR CONVERTING UTTERANCE
REPRESENTATIONS INTO ACTIONS IN A CONVERSATIONAL SYSTEM

ABSTRACT OF THE DISCLOSURE

A conversation manager processes a spoken utterance from a user of a
5 computer that is directed to an application program hosted on the computer. The
conversation manager includes a reasoning facility which accesses goal-directed rules
stored in a rules base (e.g., database). The reasoning facility also has access to a
conversational record that includes a record of previous utterances and a semantic
analysis for each utterance. The reasoning facility processes a representation of the
10 utterance by using the goal-directed rules. The reasoning facility uses means-end
analysis to determine the proper rules to execute, and thus the script calls to make to
achieve the goal of processing the utterance. While processing the utterance, the
reasoning facility attempts to resolve any ambiguities in the representation of the
utterance and to fill in any missing information that is needed to achieve its goal. The
15 reasoning facility then generates a response to the utterance, which can be a question to
the user or a command to the application program based on the utterance.